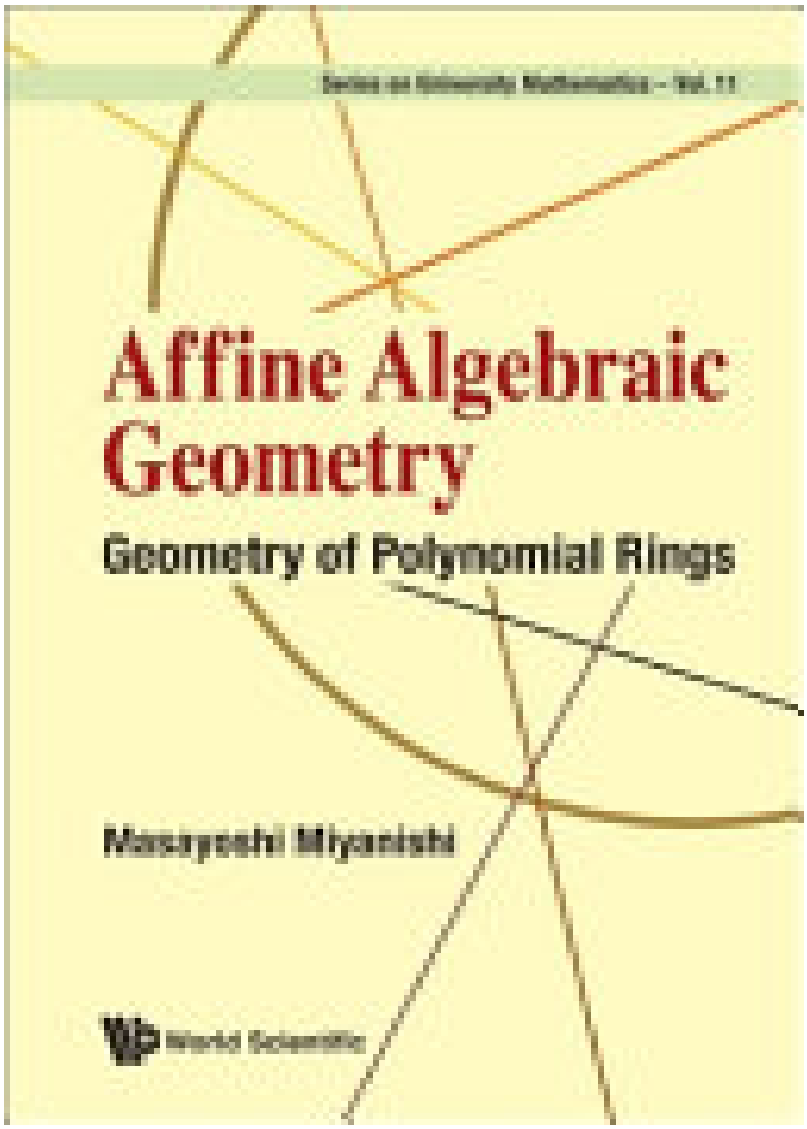
Affine Algebraic Geometry: Geometry of Polynomial Rings 1st Edition Masayoshi Miyanishi pdf download

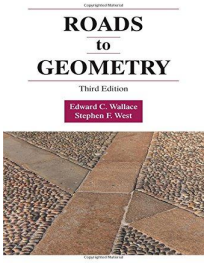
https://ebookmass.com/product/affine-algebraic-geometry-geometry-of-polynomial-rings-1st-edition-masayoshi-miyanishi/



Explore and download more ebooks at ebookmass.com

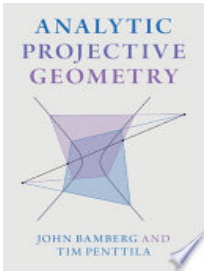
Here are some recommended products for you. Click the link to download, or explore more at ebookmass.com

Roads to Geometry, Third Edition 3rd



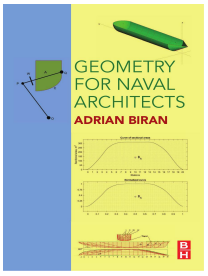
https://ebookmass.com/product/roads-to-geometry-third-edition-3rd/

Analytic Projective Geometry John Bamberg



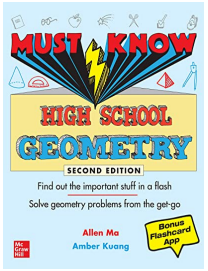
https://ebookmass.com/product/analytic-projective-geometry-john-bamberg/

Geometry for Naval Architects Adrian Biran



https://ebookmass.com/product/geometry-for-naval-architects-adrian-biran/

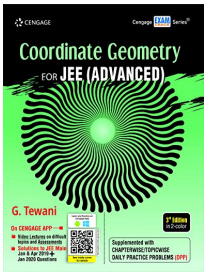
Must Know High School Geometry, 2nd Edition Amber Kuang



https://ebookmass.com/product/must-know-high-school-geometry-2nd-edition-amber-kuang/

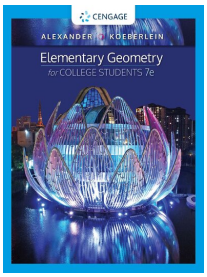
Coordinate Geometry for JEE (Advanced), 3rd edition G. Tewani

https://ebookmass.com/product/coordinate-geometry-for-jee-advanced-3rd-edition-g-tewani/



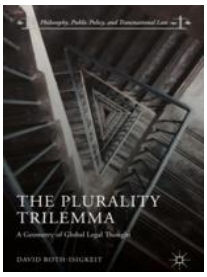
Elementary Geometry for College Students 7th Edition Daniel C. Alexander

https://ebookmass.com/product/elementary-geometry-for-college-students-7th-edition-daniel-c-alexander/



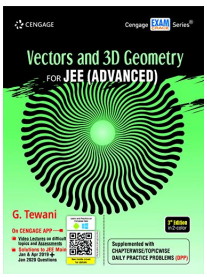
The Plurality Trilemma: A Geometry of Global Legal Thought 1st Edition David Roth-Isigkeit (Auth.)

https://ebookmass.com/product/the-plurality-trilemma-a-geometry-of-global-legal-thought-1st-edition-david-roth-isigkeit-auth/



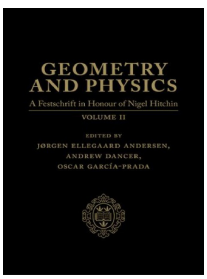
Vectors and 3D Geometry for JEE (Advanced) 3rd Edition G. Tewani

https://ebookmass.com/product/vectors-and-3d-geometry-for-jee-advanced-3rd-edition-g-tewani/



Geometry and Physics: A Festschrift in Honour of Nigel Hitchin, Volume II Andersen

https://ebookmass.com/product/geometry-and-physics-a-festschrift-in-honour-of-nigel-hitchin-volume-ii-andersen/



Series on University Mathematics – Vol. 11

Affine Algebraic Geometry

Geometry of Polynomial Rings

Masayoshi Miyanishi

World Scientific

Affine Algebraic Geometry

Geometry of Polynomial Rings

SERIES ON UNIVERSITY MATHEMATICS

ISSN: 1793-1193

Editors:

Wu-Yi Hsiang	*University of California, Berkeley, USA/ Hong Kong University of Science and Technology, Hong Kong*
Tzuong-Tsieng Moh	*Purdue University, USA*
Ming-Chang Kang	*National Taiwan University, Taiwan (ROC)*
S S Ding	*Peking University, China*
M Miyanishi	*University of Osaka, Japan*

Published

Vol. 11 Affine Algebraic Geometry: Geometry of Polynomial Rings
by M Miyanishi

Vol. 10 Linear Algebra and Its Applications
by T-T Moh

Vol. 9 Lectures on Lie Groups (Second Edition)
by W-Y Hsiang

Vol. 8 Analytical Geometry
by Izu Vaisman

Vol. 7 Number Theory with Applications
by W C Winnie Li

Vol. 6 A Concise Introduction to Calculus
by W-Y Hsiang

Vol. 5 Algebra
by T-T Moh

Vol. 2 Lectures on Lie Groups
by W-Y Hsiang

Vol. 1 Lectures on Differential Geometry
by S S Chern, W H Chen and K S Lam

Series on University Mathematics – Vol. 11

Affine Algebraic Geometry

Geometry of Polynomial Rings

Masayoshi Miyanishi

Osaka University, Japan & Kwansei Gakuin University, Japan

World Scientific

NEW JERSEY • LONDON • SINGAPORE • BEIJING • SHANGHAI • HONG KONG • TAIPEI • CHENNAI • TOKYO

Published by

World Scientific Publishing Co. Pte. Ltd.

5 Toh Tuck Link, Singapore 596224

USA office: 27 Warren Street, Suite 401-402, Hackensack, NJ 07601

UK office: 57 Shelton Street, Covent Garden, London WC2H 9HE

Library of Congress Cataloging-in-Publication Data
Names: Miyanishi, Masayoshi, 1940– author.
Title: Affine algebraic geometry : geometry of polynomial rings / Masayoshi Miyanishi, Osaka University, Japan & Kwansei Gakuin University, Japan.
Description: New Jersey : World Scientific, [2024] | Series: Series on university mathematics, 1793-1193 ; vol. 11 | Includes bibliographical references and index.
Identifiers: LCCN 2023031983 | ISBN 9789811280085 (hardcover) | ISBN 9789811280092 (ebook for institutions) | ISBN 9789811280108 (ebook for individuals)
Subjects: LCSH: Polynomial rings--Textbooks. | Geometry, Affine--Textbooks. | Geometry, Algebraic--Textbooks.
Classification: LCC QA251.3 .M593 2024 | DDC 516/.4--dc23/eng/20231016
LC record available at https://lccn.loc.gov/2023031983

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library.

Copyright © 2024 by World Scientific Publishing Co. Pte. Ltd.

All rights reserved. This book, or parts thereof, may not be reproduced in any form or by any means, electronic or mechanical, including photocopying, recording or any information storage and retrieval system now known or to be invented, without written permission from the publisher.

For photocopying of material in this volume, please pay a copying fee through the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA. In this case permission to photocopy is not required from the publisher.

For any available supplementary material, please visit
https://www.worldscientific.com/worldscibooks/10.1142/13510#t=suppl

Printed in Singapore

To the late Professor Masayoshi Nagata

This page intentionally left blank

Preface

One of the innovations brought into algebraic geometry by A. Grothendieck through his publications including *Éléments de Géométrie Algébrique* is the establishment of a bijective correspondence between affine schemes and commutative rings, by which one can introduce algebro-geometric methods to commutative algebra and create vice versa a new field in algebraic geometry where one studies geometry of affine domains over a field.

An affine domain A over a field k is the quotient ring of a polynomial ring $k[x_1, \ldots, x_n]$ by an ideal I. A geometric approach to study an affine variety $X = \operatorname{Spec} A$ with coordinate ring A is considered to study geometrically a *big* ring like A which is not a finite union of local rings.[1]

Study of polynomial rings has been an important subject in Mathematics, and there are various approaches depending on which area of Mathematics polynomials or polynomial rings are considered in. Frankly speaking, what is decisively understood about polynomials in algebraic geometry is limited to the case of one variable. Many partial results are obtained in the case of many variables, but comprehensive understanding is not decisive.

During the same period, but away from influences of A. Grothendieck, mathematicians including M. Nagata, Sh. Abhyankar, T.T. Moh, M. Suzuki and others have started their own study of polynomials in two variables over the complex number field $\mathbb{C}$ through precise analysis of how the affine plane curve defined by a polynomial behaves at infinity, i.e., out of the affine plane. Their contribution culminated in *Abhyankar-Moh-Suzuki theorem*, which states that a polynomial $f(x, y)$ whose zero locus $\{f = 0\}$ is isomorphic to an affine line can be taken as one of coordinates, i.e., $\mathbb{C}[x, y] = \mathbb{C}[f, g]$ for some polynomial $g(x, y)$. This result revived interest in the automorphism

[1] We would like to call them *global rings* if there are no fear of misunderstandings.

theorem of $\mathbb{C}[x, y]$ by Jung-Van der Kulk and geometric problems on affine surfaces including the *Cancellation Problem*.[2] This happened from the late 1960s to the early 1970s.

Around the same period there was also a worldwide revival of interest toward the Enriques-Kodaira classification of algebraic surfaces. In the mid-1970s, S. Iitaka introduced the *logarithmic Kodaira dimension* of noncomplete algebraic varieties and proposed a project of classifying noncomplete surfaces with expectations that logarithmic Kodaira dimension should work as Kodaira dimension did in the classification of smooth projective surfaces. Iitaka's students including S. Tsunoda and Y. Kawamata, and the people including T. Fujita and the author showed that Iitaka's expectation did work to a certain degree and bring some results beyond the expectation.[3] Their approach is now developed into *logarithmic geometry*, which is a study of pairs (V, D) of a complete variety V and an effective divisor D. In most cases, by Hironaka's resolution of singularities, V is made to be smooth and D a divisor with simple normal crossings. The study so far shows that geometry changes according to what kind of singularities is admitted on V and D. For an affine variety X, we find easily such a pair (V, D) by embedding X into a projective space via the embedding $X \hookrightarrow \mathbb{A}^n \hookrightarrow \mathbb{P}^n$ and taking the closure $\overline{X}$ as V and $D = V \setminus X$. By this approach, one is able to observe the geometric behavior of X at infinity, i.e., on D or near D.[4]

There is the famous *Jacobian Conjecture* which asserts that if polynomials $f_1, \ldots, f_n \in \mathbb{C}[x_1, \ldots, x_n]$ have a nonzero constant as the Jacobian determinant

$$\left| \frac{\partial(f_1, \ldots, f_n)}{\partial(x_1, \ldots, x_n)} \right|$$

then $\mathbb{C}[x_1, \ldots, x_n] = \mathbb{C}[f_1, \ldots, f_n]$. Under this assumption, the mapping

$$\varphi : \mathbb{A}^n \to \mathbb{A}^n, \quad (x_1, \ldots, x_n) \mapsto (f_1, \ldots, f_n)$$

induces a local analytic isomorphism between every point of the origin $\mathbb{A}^n$ and its image of the target $\mathbb{A}^n$. So, the conjecture asks if these local analytic isomorphisms are induced by a polynomial isomorphism. Unfortunately,

[2] It is also called the *Zariski's Problem*.

[3] See the author's book on *Open algebraic surfaces* [59].

[4] This approach was and hopefully still is successful as exemplified by a solution due to M. Koras and K. Palka of the long-standing Coolidge-Nagata conjecture which asserts that a complex irreducible curve on $\mathbb{P}^2$ homeomorphic to a line $\mathbb{P}^1$ is mapped to a line by a birational automorphism of $\mathbb{P}^2$ (see [47]).

the conjecture is not verified even in the case $n = 2$. A formal (or analytic) inverse mapping of φ is rather easy to construct, but it is very difficult to show that the inverse mapping is a polynomial mapping. This is partly due to the fact that total (or whatever) degree of polynomials are not reliable as a measure to control the behavior of polynomials because the degree changes easily as the set of coordinates $\{x_1, \ldots, x_n\}$ is replaced by another one having changes of nonlinear terms. It is not clear if there exists a geometric approach which enables to replace this method of formal inverse mapping, though some success is obtained by such approaches. One honest impression the author had through various geometric challenges is that the affine space (even the affine plane) is so immaculate that one cannot find clues to get a geometric study started with.

Affine algebraic geometry emerged from these backgrounds and problems. The subjects we treat therein are probably more biased on the affine spaces and polynomial rings, but nothing more than noncomplete varieties treated in standard algebraic geometry. As long as we want to use geometric approach we cannot avoid a minimum background of algebraic geometry. Hence this volume begins with an introduction to algebraic geometry.

The present author tried to start explanations from the beginning without omission of proofs so that the readers with knowledge of algebra and geometry taught at the third year level of the undergraduate study can understand, though some important results are not given proofs which are mostly involved and the author expects are provided by more advanced textbooks with established reputation. Precise references are given with few exceptions in such cases.

The first chapter of the present volume is based on the lectures on algebraic geometry which the author gave at Kwansei Gakuin University for graduate courses over several years. Some parts are taken from the author's books on higher algebra and algebraic geometry which are written in Japanese and have never been translated into foreign languages [60, 78]. One can consider the first chapter as a quick introduction to algebraic geometry and commutative algebra, and skip it if one has some background on the subject. Enriques-Kodaira classification of projective algebraic surfaces as well as the theory of logarithmic Kodaira dimension is explained in [59], although the referred book is an advanced one for specialists and graduate students (perhaps Ph.D students). We are reminded to make this volume as accessible as possible for the beginning students in algebraic geometry. So, we tried not to make heavy use of advanced results.

Topics specialized in affine algebraic geometry begin from Chapter 2

Visit https://ebookmass.com today to explore

a vast collection of ebooks across various genres, available in popular formats like PDF, EPUB, and MOBI, fully compatible with all devices. Enjoy a seamless reading experience and effortlessly download high-quality materials in just a few simple steps. Plus, don’t miss out on exciting offers that let you access a wealth of knowledge at the best prices!

onward. The first topic is a proof of the AMS theorem which uses the linear pencil of curves on the projective plane $\mathbb{P}^2$ and the elimination of base points. In fact, these results symbolize the dawn of affine algebraic geometry. We then explain generalizations of the Jacobian conjecture in dimension two. The readers will see how effectively affine algebraic geometry is used to this conjecture. There is also a wish of the author to reveal contributions of hidden ramification at the infinity to (not necessarily) finite étale coverings of noncomplete varieties.

The presentation of section 1.4, subsections 1.8.4 and 1.8.5 is based on the contents of [78]. The author would like to express his belated thanks to late Professors Masayoshi Nagata and Masaki Maruyama for the joint authorship of the book. The present book is dedicated to Professor Nagata, who is one of the founders of the research area of studying geometry of rational surfaces and polynomials. The contents of Chapters 2 and 3 are partly based on the author's lecture notes [58] and [62]. Last but not the least, the author would like to express his indebtedness to the editor Ms. Kwong Lai Fun of World Scientific Publ. Co. for the opportunity to write a book on affine algebraic geometry and constant encouragement during the writing of this book.

June, 2023

M. Miyanishi

Contents

Preface vii

1. Introduction to Algebraic Geometry 1

1.1 Review on basic results in commutative algebra 1
1.1.1 Ring of quotients and local ring 1
1.1.2 Spectrum of a ring and Zariski topology 3
1.1.3 Irreducible decomposition of a topological space . 5
1.1.4 Prime ideal decomposition of radical ideals 7
1.1.5 Generic point, closed point and Krull dimension . 9
1.1.6 Hilbert basis theorem 11
1.1.7 Integral extension and Noether normalization lemma 12
1.1.8 Lying-over theorem and Going-up theorem 16
1.1.9 Krull dimension of affine domains 19
1.2 Review on finitely generated field extensions 20
1.2.1 Transcendence basis and transcendence degree . . 20
1.2.2 Regular extension and separable extension 24
1.3 Schemes and varieties 27
1.3.1 Affine schemes of finite type and affine varieties . 27
1.3.1.1 Irreducible decomposition of an affine scheme of finite type 27
1.3.1.2 Density of the set of closed points 28
1.3.1.3 Affine varieties and function fields 30
1.3.1.4 Structure sheaves 31
1.3.2 Morphisms of affine schemes 33
1.3.2.1 Intersection of affine open sets 34
1.3.2.2 Open immersion and closed immersion . 35

1.3.2.3 Behavior of structure sheaves under a morphism 35
1.3.3 Schemes and varieties 37
1.3.3.1 Definition and examples of schemes . . . 37
1.3.3.2 Morphism of schemes 39
1.3.3.3 Fiber products of schemes 40
1.3.3.4 Separated schemes 41
1.3.3.5 Rational maps of algebraic varieties . . . 43
1.4 Graded rings and projective schemes 45
1.4.1 Graded rings and projective spectrums 45
1.4.2 Projective schemes and projective varieties 50
1.4.2.1 General properties of projective schemes 50
1.4.2.2 Projective varieties 53
1.4.2.3 Projective closure of an affine variety . . 56
1.5 Normal varieties 59
1.5.1 Discrete valuation rings and normal rings 59
1.5.2 Normalization of affine domains 64
1.5.3 Normal varieties and normalization of algebraic varieties 66
1.5.4 Unique factorization domains 69
1.5.5 Weil divisors and divisor class group 74
1.5.6 Zariski's main theorem 76
1.6 Smooth varieties 84
1.6.1 System of parameters and regular local ring 84
1.6.2 Regular sequence and depth of a local ring 94
1.6.3 Jacobian criterion 97
1.6.4 Sheaf of differential 1-forms and canonical sheaf . 100
1.7 Divisors and linear systems 110
1.7.1 Invertible sheaves 110
1.7.2 Cartier divisors 112
1.7.3 Linear systems 114
1.7.4 D-dimension, Kodaira dimension and logarithmic Kodaira dimension 117
1.8 Algebraic curves and surfaces 120
1.8.1 Serre duality and Euler-Poincaré characteristic . . 120
1.8.2 Riemann-Roch theorem for a curve 121
1.8.3 Algebraic curves 123
1.8.4 Intersection theory on algebraic surfaces 126
1.8.5 Riemann-Roch theorem for surfaces 135

1.8.6 Fibrations and relatively minimal models of surfaces 136
1.9 Appendix to Chapter 1 144
1.9.1 Primary decomposition of ideals 144
1.9.2 Tensor products of algebras 148
1.9.2.1 Construction 148
1.9.2.2 Flat modules 150
1.9.3 Inductive limits and projective limits 155
1.9.3.1 Inductive limits 155
1.9.3.2 Projective limits 156
1.9.3.3 Ideal-adic completion 156
1.9.4 Fiber products of schemes 158
1.9.5 Reviews on sheaf theory 162
1.9.6 Čech cohomology of sheaves of abelian groups . . 169
1.9.6.1 Čech cohomology 169
1.9.6.2 Coherent sheaf cohomologies over projective varieties 172
1.10 Problems to Chapter 1 177

2. Geometry on Affine Surfaces 191

2.1 Characterization of the affine plane 191
2.2 Admissible data for an affine curve with one place at infinity 198
2.2.1 Euclidean transformation associated with admissible data 199
2.2.2 (e, i)-transformation associated with admissible data 206
2.2.3 Irreducible affine curves with one-place at infinity 210
2.2.4 Abhyankar-Moh-Suzuki theorem 212
2.2.5 Theorem of Gutwirth and pathological $\mathbb{A}^1$-fibrations 213
2.2.6 Abhyankar-Moh problem on embedded lines in positive characteristic 216
2.3 Automorphism theorem of the affine plane 220
2.3.1 Linear pencils of rational curves and field generators 220
2.3.2 Proof of automorphism theorem by Jung and van der Kulk 226
2.4 Algebraic group actions on the affine plane 232

2.4.1 Algebraic groups, actions and quotient spaces . . 232
2.4.2 Finite subgroups of Aut $k[x, y]$ 236
2.4.3 Finite group actions and invariants 238
2.4.4 Quotient singularities on surfaces 248
2.5 Birational automorphisms of rational surfaces 256
2.5.1 Noether factorization theorem 256
2.6 Boundary divisors of affine surfaces 263
2.6.1 Quantitative criterion of SNC divisors 263
2.6.2 Shift transformation on the boundary divisor . . . 266
2.6.3 Theorem of Ramanujam-Morrow 269
2.7 Appendix to Chapter 2 276
2.7.1 Unramified morphism 276
2.7.2 Étale coverings 280
2.7.3 Riemann-Hurwitz formula for curves 281
2.7.4 Inverse and direct images of divisors and the projection formula 282
2.7.5 Amalgamated product of two groups 286
2.7.6 Quotient varieties by finite group actions and ramification of the quotient morphism 290
2.8 Problems to Chapter 2 300

3. Geometry and Topology of Polynomial Rings — Motivated by the Jacobian Problem 319

3.1 Plane-like affine surfaces 319
3.1.1 Simply connected algebraic varieties 320
3.1.2 Unit group, unit rank and independence of boundary divisors 322
3.1.3 Gizatullin surfaces and affine pseudo-planes 324
3.1.4 Affine pseudo-planes — more properties 329
3.1.5 tom Dieck construction of affine pseudo-planes . . 332
3.1.6 Platonic $\mathbb{A}^1_*$-fiber spaces 336
3.1.7 Homology planes 342
3.2 Jacobian conjecture and related results 345
3.2.1 Jacobian conjecture and its variants 345
3.2.2 Partial affirmative answers 349
3.3 Generalized Jacobian conjecture — affirmative cases . . . 354
3.3.1 Results in arbitrary dimension 354
3.3.2 Results for surfaces 356
3.3.2.1 Surfaces having $\mathbb{A}^1$-fibrations 356

3.3.2.2 Surfaces having $\mathbb{A}^1_*$-fibrations 357
3.3.2.3 Case of $\overline{\kappa} = 1$ 363
3.4 Generalized Jacobian conjecture for various cases 369
3.4.1 Case of $\mathbb{Q}$-homology planes of $\overline{\kappa} = -\infty$ 369
3.4.2 Counterexamples 372
3.5 Appendix to Chapter 3 378
3.5.1 Makar-Limanov invariant 378
3.5.2 The fundamental group at infinity 381
3.5.3 Algebraic surfaces and log Kodaira dimension . . 385
3.5.4 Logarithmic ramification formula 387
3.6 Problems to Chapter 3 390

4. Postscript 407

4.1 AMS theorem and thereafter 407
4.2 Suzuki-Zaidenberg formula 408
4.3 Cancellation problems 409

Bibliography 411

Index 417

This page intentionally left blank

Chapter 1

Introduction to Algebraic Geometry

1.1 Review on basic results in commutative algebra

All rings treated in this book are commutative and unitary unless otherwise specified.

1.1.1 *Ring of quotients and local ring*

A ring R is *noetherian* if every ascending chain of ideals

$$I_0 \subseteq I_1 \subseteq \cdots \subseteq I_n \subseteq I_{n+1} \subseteq \cdots$$

ceases to increase. Namely, there exists an integer N such that $I_n = I_{n+1}$ for every $n \geq N$. This condition is called the *ascending chain condition for ideals* (ACC, for short). The ACC is equivalent to the condition that every ideal is finitely generated.

An R-module M is said to be *finitely generated* over R, or simply a *finite* R-module if $M = Rm_1 + \cdots + Rm_n$ for a finite set of generators $\{m_1, \ldots, m_n\}$. The quotient module M/N of a finite R-module M by an R-submodule N is a finite R-module, and a submodule N is also finite if R is noetherian (see Lemma 1.1.11). Conversely, if an R-submodule N of M and the quotient module M/N are finite, then so is the R-module M.

A subset S of a ring R is a *multiplicative set* (or a *multiplicatively closed set*) if

(i) $0 \notin S$, $1 \in S$, and
(ii) $s, t \in S$ implies $st \in S$.

If $\mathfrak{p}$ is a prime ideal of R, then the complement $S := R \setminus \mathfrak{p}$ is a multiplicative set. In fact, the definition of prime ideal implies, by contrapositive, $ab \notin \mathfrak{p}$ if $a \notin \mathfrak{p}$ and $b \notin \mathfrak{p}$. If S is a multiplicative set of R, the *ring of quotients*

(or *ring of fractions*) $S^{-1}R$ is defined as the set

$$S^{-1}R = \left\{ \frac{a}{s} \mid a \in R, s \in S \right\},$$

where a/s denotes the equivalence class in the product $R \times S$ under the equivalence relation

$$(a, s) \sim (b, t) \text{ if and only if } u(at - bs) = 0 \text{ for some } u \in S.$$

Hence a/s is considered as a usual fraction whose numerator is an arbitrary element $a \in R$ and whose denominator is an element $s \in S$. But $a/s = b/t$ if $(a, s) \sim (b, t)$. If R is an integral domain, the above equivalence relation holds if and only if $at = bs$. The set $S^{-1}R$ has a ring structure for which addition and multiplication are defined respectively by

$$\frac{a_1}{s_1} + \frac{a_2}{s_2} = \frac{a_1 s_2 + a_2 s_1}{s_1 s_2}, \quad \frac{a_1}{s_1} \cdot \frac{a_2}{s_2} = \frac{a_1 a_2}{s_1 s_2}.$$

There is a natural ring homomorphism $i : R \to S^{-1}R$ defined by $i(a) = a/1$. The kernel of i is an ideal

$$I_0 = \{a \in R \mid as = 0 \text{ for some } s \in S\}.$$

With this ring homomorphism i, there is a bijective correspondence between the ideals I of R such that $I \supseteq I_0$ and $I \cap S = \emptyset$ and the set of ideals of $S^{-1}R$. Here we consider only *proper* ideals, where I is a *proper* ideal of R if $I \subsetneqq R$. The bijective correspondence is given by

$$I \mapsto I(S^{-1}R) = \left\{ \frac{a}{s} \mid a \in I,\ s \in S \right\}, \quad J \mapsto i^{-1}(J).$$

This correspondence restricts to a bijection between

$$\{\mathfrak{p} \mid \text{a prime ideal of } R \text{ such that } \mathfrak{p} \cap S = \emptyset\}$$

and

$$\{\mathfrak{P} \mid \text{a prime ideal of } S^{-1}R\}.$$

We denote the ideal $i^{-1}(J)$ by $J \cap R$ by abuse of notation. This observation implies that $S^{-1}R$ is noetherian if so is R.

For example, let $S = R \setminus \mathfrak{p}$ for a prime ideal $\mathfrak{p}$ of R. We denote $(S^{-1}R)$ by $R_\mathfrak{p}$ and $\mathfrak{p}(S^{-1}R)$ by $\mathfrak{p}R_\mathfrak{p}$. Then $\mathfrak{p}R_\mathfrak{p}$ is the biggest prime ideal with respect to inclusion. Hence $\mathfrak{p}R_\mathfrak{p}$ is a unique *maximal* ideal[1] of $R_\mathfrak{p}$. A ring R is called a *local ring* if it contains a unique maximal ideal $\mathfrak{m}$ in the sense that any proper ideal I of R is contained in $\mathfrak{m}$. By the notation $(R, \mathfrak{m})$ we

[1] An ideal $\mathfrak{m}$ of R is a *maximal* ideal if I is a proper ideal of R such that $I \supseteq \mathfrak{m}$ then $I = \mathfrak{m}$.

mean that R is a local ring with maximal ideal $\mathfrak{m}$. A maximal ideal $\mathfrak{m}$ is a prime ideal. In fact, suppose that $ab \in \mathfrak{m}$. Let $I = \mathfrak{m} + aR$, which is an ideal such that $I \supseteq \mathfrak{m}$. Hence either $I = R$ or $I = \mathfrak{m}$. If $I = \mathfrak{m}$ then $a \in \mathfrak{m}$. Suppose that $I = R$. Then $1 = ax + z$ with $z \in \mathfrak{m}$. Then $b = abx + bz \in \mathfrak{m}$. So, $a \in \mathfrak{m}$ or $b \in \mathfrak{m}$.

Let R be an integral domain. Then $S := R \setminus \{0\}$ is a multiplicative set. The ring of quotients $S^{-1}R$ is now a field, which we call the *field of quotients* or the *field of fractions* and denote by $Q(R)$.

Let I be an ideal of R. An ideal of the quotient ring (or the residue ring) $\overline{R} = R/I$ is written in a form J/I, where J is an ideal of R such that $J \supseteq I$. If R is noetherian, so is the ring $\overline{R}$.

1.1.2 *Spectrum of a ring and Zariski topology*

Let R be a ring. The set of prime ideals of R is called the *spectrum* (spec, for short) of R and denoted by

$$\operatorname{Spec} R = \{\mathfrak{p} \mid \text{ a prime ideal of } R\}.$$

Given a ring R, the spectrum $\operatorname{Spec} R$ is also called an *affine scheme* with the *coordinate ring* R. We can define a topology, called the *Zariski topology*, in $\operatorname{Spec} R$ by assigning closed sets satisfying axioms of topology. A closed set is $V(I)$ for an ideal I of R, where

$$V(I) = \{\mathfrak{p} \in \operatorname{Spec} R \mid \mathfrak{p} \supseteq I\}.$$

Axioms of topology for closed sets require

(i) $\operatorname{Spec} R$ and $\emptyset$ are closed sets.

(ii) $\bigcap_{\lambda\in\Lambda} V(I_\lambda)$ is a closed set, where $\{I_\lambda \mid \lambda \in \Lambda\}$ is possibly an infinite set.

(iii) A finite union $\bigcup_{j\in J} V(I_j)$ is a closed set.

For (i), we have $\operatorname{Spec} R = V((0))$ and $\emptyset = V(R)$, where (0) is the zero ideal. For (ii), we have $\bigcap_{\lambda\in\Lambda} V(I_\lambda) = V(\sum_{\lambda\in\Lambda} I_\lambda)$. For (iii), it suffices to show that

$$V(I_1) \cup V(I_2) = V(I_1 I_2) = V(I_1 \cap I_2),$$

where $I_1 I_2$ is the ideal of R generated by $\{a_1 a_2 \mid a_1 \in I_1, a_2 \in I_2\}$. Since $I_1 \cap I_2 \supseteq I_1 I_2$ and since $\mathfrak{p} \supseteq I_1 I_2$ implies either $\mathfrak{p} \supseteq I_1$ or $\mathfrak{p} \supseteq I_2$, we have

$$V(I_1) \cup V(I_2) \supseteq V(I_1 I_2) \supseteq V(I_1 \cap I_2) \supseteq V(I_1) \cup V(I_2),$$

which proves the assertion. The Zariski topology is T_0, but not necessarily T_1. Namely, if two distinct prime ideals $\mathfrak{p}, \mathfrak{q}$ are given, there is a closed set

Visit https://ebookmass.com today to explore

a vast collection of ebooks across various genres, available in popular formats like PDF, EPUB, and MOBI, fully compatible with all devices. Enjoy a seamless reading experience and effortlessly download high-quality materials in just a few simple steps. Plus, don’t miss out on exciting offers that let you access a wealth of knowledge at the best prices!

Exploring the Variety of Random Documents with Different Content

Turks were too much accustomed to vanquish the Greeks to yield without a desperate contest. Philes, however, remained master of the field, and followed up his success with such vigour that he soon besieged the Turks in their fortified camp, while the Byzantine fleet, aided by eight Genoese galleys, blockaded them by sea. After a fierce struggle, the camp was taken; the greater part of the Turks were slain by the Greeks: the remainder were sold as slaves by the Genoese. The affair occurred in the year 1315. It may be considered as the last scene of the Catalan expedition, so that for twelve years the greater part of the Greek Empire of Constantinople had been plundered and devastated by the Catalan Grand Company and its Turkish auxiliaries.

Other enemies had taken advantage of the weakness of the empire during this calamitous period. The Seljuk Turks had almost completed the conquest of Asia Minor; the Ottomans had extended their possessions on the southern shores of the Propontis; the Genoese arrogated to themselves the possession of several cities and islands, and various chiefs seized different towns that were left without garrisons to defend them, and lived in a state of piratical independence. Every bond of society appeared to be dissolved in the countries inhabited by the Greek race, and every stranger, whether Mussulman or Christian, thought himself strong enough to subdue the Greeks.

The most important conquest of the time, however, was that of Rhodes, by the Knights Hospitaller of St. John of Jerusalem, both from its durability and from the renown of the conquerors. Andronicus sent an army to raise the siege; but his troops were defeated, and the knights took the city of Rhodes on the 15th of August, 1310. As sovereigns of this beautiful island they were long the bulwark of Christian Europe against the Turkish power; and the memory of the chivalrous youth who, for successive ages, found an early tomb at this verge of the Christian world, will long shed a romantic colouring on the history of Rhodes. They sustained the declining glory of a state of society that was hastening to become a vision of the past; they were the heroes of a class of which the

Norse sea-kings had been the demigods. The little realm they governed as an independent state consisted of Rhodes, with the neighbouring islands of Cos, Calymnos, Syme, Leros, Nisyros, Telos, and Chalce; on the opposite continent they possessed the classic city of Halicarnassus, and several strong forts, of which the picturesque ruins still overhang the sea.

The emperor Andronicus II displayed the same want of sound judgment and right feeling in his private that he did in his public conduct, and his latter days were embittered by family disputes caused by his own folly and injustice. His second wife, Irene of Montferrat, persecuted him with demands to dismember the empire, in order to form appanages for her children. Andronicus resisted her solicitations at the expense of a quarrel, and Irene long lived separated from him at Thessalonica. The emperor Michael allowed his father to control the arrangements of his family and regulate his private actions. Michael's eldest son was named Andronicus. He was the third emperor of the name who occupied the Byzantine throne, but he is known in history generally as Andronicus the Younger. When a child, he was an especial favourite with his grandfather, who directed his education. That education was undoubtedly a mixture of unwise indulgence and capricious restraint. The young Andronicus grew up a dissipated youth, and his debauched habits produced a terrible tragedy in his family. He was informed that his favourite mistress admitted another lover, and he employed bravos to waylay his rival. It happened that on that very night his own brother Manuel hastened quickly to the lady's house, where he expected to find Andronicus. The assassins mistook the despot for the lover, and Manuel was murdered on the spot. The dreadful news reached their father Michael at Thessalonica, where he was residing in a declining state of health. Anguish soon terminated his life (1320).

[1320-1321 A.D.]

The young Andronicus was now heir-apparent to the empire, if the expression be admissible in a state without a fixed order of hereditary succession. But the murder of Manuel changed the affection of the old emperor into implacable hatred, and it was generally thought

that the reigning sovereign had the power of naming his successor. The emperor Michael VIII had introduced the custom that a new oath of allegiance should be taken, whenever a change occurred in the order of succession. When Michael, the son of Andronicus II, died, the new oath was administered in the name of Andronicus II alone, and did not contain that of Andronicus III, who was the direct heir. It also contained a clause promising implicit obedience to whomsoever he might declare emperor. These circumstances indicated that he intended to exclude his grandson from the throne; nor was he long in selecting a favourite on whom it was supposed he intended to confer the imperial title. The choice was marked by the singular perverseness which characterised many of his most important acts. He had compelled his second son Constantine to marry the daughter of his favourite minister, Muzalon. The incidents of this union were both ridiculous and disgraceful. The lady had been destined to be the bride of Theodore, the emperor's brother, when it was discovered that she had already indulged in illicit intercourse with one of her relatives, and would have presented the imperial family very prematurely with an intruder. Theodore broke off the match; but the emperor, moved by his attachment to the father, and by the penitence of the fair sinner, subsequently compelled his own son Constantine to marry her. The young prince thought himself entitled to have a bastard as well as his wife. The youth was named Michael Catharus, and became so great a favourite with his grandfather, the emperor Andronicus, that he showed a disposition to adopt him as the heir to the empire, but the representations of his ministers prevented this act of folly.

[1321-1332 A.D.]

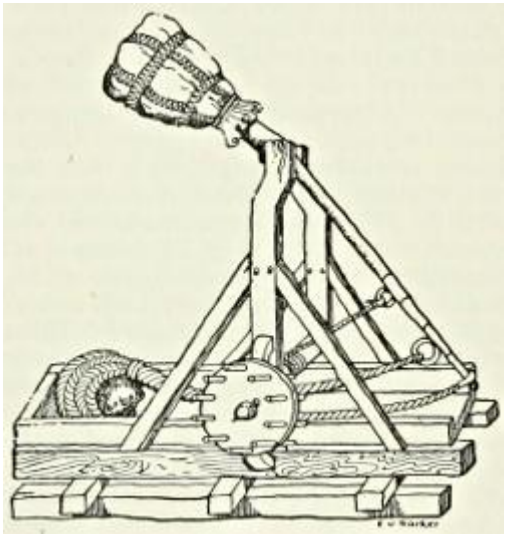
The government of the old emperor was now generally unpopular; and as he was suspected of being anxious to prevent his grandson Andronicus from succeeding to the throne, the cause of the prince was made the rallying-point of the discontented. The most distinguished partisans of Andronicus the Younger were Cantacuzenus the historian, a man of the highest rank, of extensive connections among the Byzantine aristocracy, of great wealth,

ability, and military as well as literary accomplishments, but devoured by ambition, and overflowing with cunning and self-conceit; Synadenus, a man of equal rank and talent; and Sir Janni, a man of superior boldness and ability, but with a want of fixed principles and steady conduct that gave him the character of a political adventurer. With these it is necessary to mention Apocaucus, who was the ablest administrator and financier of the party. The intrigues of the partisans of the young prince did not escape the attention of the emperor's ministers, who would, doubtless, have maintained order by arresting the most dangerous, had not Andronicus been more anxious to punish his grandson, by depriving him of all chance of succeeding to the empire, than to prevent a rebellion. He now resolved to bring the prince to a public trial; and on Palm Sunday, 1321, the young Andronicus was unexpectedly summoned to the palace of Blachernæ. His partisans comprehended that the crisis of their own fate, as well as that of the prince, must be decided before sunset. Cantacuzenus and Synadenus accordingly assembled their followers, and filled the palace with a force that so completely intimidated both the judges and the emperor that the prince was pardoned, and a feigned reconciliation took place between the grandfather and the grandson.

Andronicus II resolved to remove Cantacuzenus and Synadenus from his grandson's society, for he justly considered them as the authors of the plots against his government. Cantacuzenus was named governor of Thessaly, and Synadenus was sent to Prilapos. These officers collected as many troops as they were able under the pretence of repairing to their posts; and when their levies were completed they marched to Hadrianopolis, where the young Andronicus joined them and raised the standard of rebellion.

The prince was popular; he gained the people by proclaiming that the province of Thrace was exempt from some of the most onerous taxes, and his mercenaries enabled him to advance against Constantinople. But his soldiers, who cared little for political questions, pillaged the inhabitants wherever they passed; bands of robbers began to lay waste the villages which had escaped

destruction from the Catalans and the Turks, and the collectors of the public revenue, availing themselves of these disorders, embezzled the money in their hands. Cantacuzenus says that the young Andronicus was averse to march against his grandfather, fearing lest his army should storm Constantinople. In order, therefore, to prevent his grandfather from being dethroned, he wrote secretly to the old emperor to advise that measures might be concerted to turn aside the first ardour of his own troops. A treaty was concluded at Rhegium, where the prince had established his headquarters, by which the rights of Andronicus the Younger to the succession of the empire were recognised, and he was invested with the government of Thrace from Selymbria to Christopolis as his appanage.



A Fourteenth Century Catapult

This peace was of very short duration. The exactions of the prince's troops, and the intrigues of Sir Janni and the emperor induced several cities of Thrace to desert the party of the young Andronicus. Heraclea received an imperial garrison, and the prince, finding that his cause was losing ground, assembled his army and laid siege to the city in November, 1321. His troops had clamoured for the renewal of the war during the summer; they were averse to keep the field in winter, so that, when the attack on Heraclea was defeated, the prince marched up to the walls of Constantinople. He had now few partisans in the capital, and he was soon compelled to retire into winter quarters at Didymoteichos. A new treaty of peace was concluded at Epibates in July, 1322, which removed some of the causes of dissatisfaction to both parties.

On the 2nd of February, 1325, Andronicus the Younger received the imperial crown. This may be considered a proof that the ministers of the emperor had persuaded him to stifle all his

resentment, and lay aside his schemes for excluding his grandson from the throne. But in the following year the two emperors allowed the city of Prusa to be taken by the Ottoman Turks, without either making an effort to relieve it. This fact seemed to prove that neither could allow his best officers and troops to succour this important city, lest his colleague should take advantage of their absence. Intrigues followed intrigues.

The civil war was renewed under circumstances extremely unfavourable to the old emperor, whose conduct rendered it inevitable. The people were universally disgusted with his despotism and injustice, and the young Andronicus seems to have expected that they would have immediately admitted him into Constantinople. Finding that this could not be effected, he hastened into Macedonia in the midst of winter, leaving the protostrator Synadenus to blockade the capital. Liberal promises of reduced taxation, and the assurance that all arrears due to the imperial treasury should be cancelled, insured his entry into most of the towns, and rendered his march a triumph. Thessalonica, Edessa, Castoria, Berœa, Pelagonia, Achrida, and Deabolis, opened their gates. The krall [king] of Servia, who consulted his own interest, refused to assist the officers of the reigning emperor, and took advantage of the confusion to gain possession of the frontier fortress of Prosacon. Strumbitza and Melenicon were the only strong places that remained in the possession of the partisans of Andronicus II.

While these events happened, Synadenus gained a complete victory over the garrison of Constantinople, on its making an attempt to raise the blockade. When the news of this victory reached Andronicus, he hastened to the army before the walls of the capital. Treasonable assistance was soon secured, and on the night of Monday, May 23rd, 1328, a party of soldiers scaled the walls; the garrison joined in proclaiming Andronicus III; the gates were thrown open, and the young emperor marched directly to the imperial palace to assure his grandfather that, though he had ceased to govern, he would be treated with all the honour due to a sovereign prince.

Two years after the taking of Constantinople, Andronicus III was attacked by a serious illness, and his ministers feared lest his grandfather might again recover the throne. To prevent the possibility of this event, Synadenus compelled the old man to become a monk, and to sign a declaration that he would never again mount the throne, nor pretend to dispose of the empire in case of his grandson's death. Andronicus II had already lost the use of his eyes, and this, his last public act, was signed with two crosses, one in red ink as emperor and another in black as a humble monk. The patriarch Isaiah sent to congratulate him on his change of life: the petulant old man regarded this message as an insult, and sent back some violent and probably not unjust reproaches to the head of the church. His name continued to be mentioned in the public prayers as the most religious and most Christian basileus, the monk Antony. One evening, after a literary party at which his daughter Simonida was present, he was suddenly seized with an illness which soon terminated his life. He expired on the 13th day of February, 1332, in the seventy-fourth year of his age.

[1332-1352 A.D.]

Andronicus II was a man who, with few personal vices, possessed many of the worst qualities of a sovereign. He had capacity enough to direct the whole civil and ecclesiastical business of the empire, but was destitute of the judgment necessary to direct it well. He rarely took a right step, and never at the proper time; so that his petulant pride and pedantic despotism proved more ruinous to the empire than the worst vices of many of his predecessors. His ecclesiastical bigotry especially served as an instrument of providence for effecting the ruin and degradation of the orthodox Eastern church, and of the Greek race. That the Greeks allowed themselves to be so long misled and oppressed by so worthless and weak a sovereign, may perhaps be accepted as a proof that the nation was sunk in selfishness and bigotry like the emperor.[c]

Andronicus III, now absolute monarch, showed great bravery against the Turks, but he could not stay their progress in Anatolia,

nor prevent their descents on Europe. Neither could he complete the conquest of Epirus nor live at peace with his neighbours on the peninsula.

He died in 1341, leaving his son, Joannes V (Palæologus), a minor, under the regency of his wife, Anne of Savoy. The lord chamberlain, Cantacuzenus, affected at first to protect them, but his protégés soon found him too powerful. They got up scandals about him, imprisoned his relatives, allowed the houses of his partisans to be destroyed. These latter forced him to take the crown under the title of Joannes VI. Civil war again broke out in the empire. Cantacuzenus allied himself with Stephen, krall of Servia, and with Omur Beg, the Seljuk emir of Ionia. Anne of Savoy asked help from the latter's rival, Orkhan, sultan of the Ottomans.

Intrigue alternated with massacre. Cantacuzenus contrived to gain over this same Orkhan by giving him his daughter Theodora. On both sides the infidels were authorised to carry off Byzantine subjects, and the ports and vessels of the empire were placed at their disposal to enable them to transport their captives into Asia. The foreigners took advantage of the general anarchy to oppress the provinces and towns. The krall of Servia conquered Macedonia as far as Pheræ, and called himself czar of the Greeks and Servians. The Genoese retook Chios, which Andronicus III had seized from them, and blockaded Constantinople, defended by other Italians, under Facciolati.

The latter, whilst the empress was giving a banquet to her partisans, opened the Golden Gate to Cantacuzenus. Anne was obliged to come to an agreement. It was arranged that Cantacuzenus should be emperor first, but only for ten years; that is, until Joannes V attained his twenty-first year. The partisans of neither side were satisfied with this transaction.

So feeble was the empire that the Genoese ventured to impose their own will in the very capital. Cantacuzenus had tried to reconstruct an Hellenic navy, and attempted to bring a little life into the port of Byzantium by lowering the port dues. The Genoese

considered this injurious to their Galatian colony. They massacred the crew of a Grecian ship, and exacted that a large territory adjoining Galata should be ceded to them. A war followed, which lasted four years (1348-1352). To fight the Genoese the Greeks had called in Venetian and Catalan fleets. A bloody naval battle was fought under the very walls of the town, and the Greeks were victorious. Cantacuzenus had to capitulate (May 6, 1352) and give them all they demanded.

Civil war also soon recommenced. The whole country was horribly ravaged. An Ottoman army under Suleiman (Solyman), son of Orkhan and in Cantacuzenus' pay, carried off the inhabitants by thousands. Joannes V was despoiled of his authority and private domains; in the room of the fallen prince, Matthias, son of Joannes VI, was associated with his father and crowned emperor at St. Sophia (1354). Then, in 1355, with the concurrence of Francesco Gattilusio and other Genoese, Palæologus surprised and entered Constantinople. He had to negotiate.

Joannes V and Joannes VI continued to live in the palace with equal authority. Matthias was to keep the crown for life, as well as Hadrianopolis. Lesbos had ceded its full sovereignty to Gattilusio (1355).

Joannes VI did not feel at all secure. Perhaps he felt remorse for having brought so many evils on the empire; perhaps he had a fit of religious fervour and contempt for worldly things, but at any rate he donned the monkish garb and retired into the convent of Mangana (1355). He only came out to join his prayers to the threats of Joannes V in order to make Matthias lay aside the purple (1357).

By the abdication to which he had forced his son, the legitimate order of succession resumed its course in the house of Palæologus. Unhappily, the Greek Empire of the fourteenth century was not strong enough to stand the shocks of civil war. Irreparable losses in men, money, and territory were inflicted on her. Genoa and Venice were driving their talons deeper and deeper into her enfeebled body. The Greek Morea, and even Thessalonica, had grown used to doing

as they would. Finally, the different parties had shown the Ottomans methods which they were not likely to forget.[88]

THE CRUSADE OF THE FOURTEENTH CENTURY

[1343-1391 A.D.]

Latin Europe alone could have saved the Greek Empire, but in the fourteenth century she was worn out by wars with nation after nation, by the antagonism between the Roman pope and the Avignon pope, and even between council and council. When a sovereign pontiff appeared authorised to speak in the name of Europe, he imposed, as the first condition to an uncertain union, the recognition of his supremacy by the Eastern church.

It would take too long to recall all the crusading projects which were raised in the papal court of Avignon, and in that of the French kings from Philippe le Bel to Philippe VI of Valois. Under Benedict XII, a fleet was placed under the orders of the legate Henry, patriarch *in partibus* of Constantinople. Smyrna was taken from the Ionian emir, Omur Beg (1343). Fifty-two pirate ships were destroyed by the Christian fleet in sight of Athos (1344).

In 1366 Amadeus VI of Savoy, uncle of Joannes V, appeared in Byzantine waters. He took Gallipoli and Sozopolis from the Turks, repulsed an invasion of the Bulgarians, took from them Mesembria and Varna, and dictated a peace. In 1390, Louis II of Clermont, duke of Bourbon, landed at Tunis, Africa (Mehadia), but failed in the assault.

Thus in the West the crusading spirit was not yet extinct. Many of these crusades inspired little love for the Grecian Empire. Among the numerous projects presented to the popes and western sovereigns, there was one urging that the conquest of Byzantium was an indispensable preliminary to delivering the Holy Land.

Joannes V Palæologus hoped, although this formidable Western sword was in so many hands, to turn it against the enemies of the

empire. So pressing was the danger, that the head of the orthodox church had to consent to go and kneel at Rome before Pope Urban V (1369). Unfortunately the resources of the pope had been exhausted by the last enterprise. At Venice Joannes V had to borrow, at high interest, enough money to continue his journey. After a fruitless tour in the south of France, as Joannes V was passing through Venice, quite unable to repay the loan, he was imprisoned at the request of his creditors. Thus the sacred person of the heir of Constantine the Great was kept in pledge by Venetian usurers.

THE EMPIRE TRIBUTARY TO THE TURKS

[1369-1391 A.D.]

Joannes V had two sons, between whom he had divided his dominions beforehand. The elder, Andronicus, had been associated with the emperor; the second, Manuel, was governor of Thessaly. The emperor first addressed himself to the elder, begging him to collect funds for his ransom. Andronicus coldly replied that the treasury was empty. In truth, he was in no hurry to hasten the return of his father and colleague. Manuel had more pity. He mortgaged his lands and sent the money.

When Joannes returned to Constantinople he rewarded the two sons according to their deserts. Andronicus he disgraced, and associated Manuel with him in the empire. Abandoned by all his supporters, he consented to pay tribute to Murad I in 1381. Then, under the weight of crushing necessities, he had to sustain a further humiliation. Besides the tribute, he promised Murad to furnish a military contingent, and to give him one of his sons as hostage.

The Greek Empire now found itself in exactly the same position with regard to the Turks as the Russian princes were in relation to the khans of the Golden Horde. Like the princes of Moscow, Tver, and Ryazan, the basileus only existed by submitting to humiliations; like them, he had to cringe to the horde. His situation was worse than theirs; the khan only asked from the Russian *kniazes* tribute,

obedience, and a military contingent. What more could he find to tempt his avarice in poverty-stricken Russia? The relations of the sultan and the basileus were not the same. The one could not pardon the other for perpetuating his memory in a city that was to be the capital of the new empire. The exactions were therefore more severe, the humiliations more cruelly calculated, the desire for spoliation was inextinguishable. Joannes V ended his miserable life in 1391, and his son Manuel succeeded him.

Of all the Palæologi, Manuel was the most cultivated and the most generous. He only felt the more shame at the degradation of the times. Perhaps he may best be compared with the Russian prince, Alexander Nevski.[e]

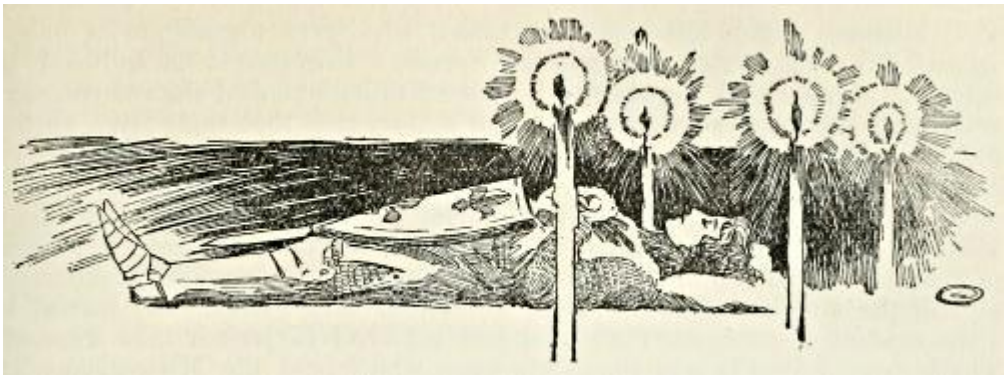
FOOTNOTES

[85] [Well may Gelzer[f] comment on this event, "The very worst friend of the Greeks did not see that the regaining of Constantinople was the true beginning of the national misfortune."]

[86] The ceremony took place on the 2nd February, 1267.—PACHYMERES,[d] I, 207. The power of Michael was despotic, and his conduct arbitrary in the extreme. To render Veccus and Xiphilinus amenable to his ecclesiastical reasoning, he ordered their houses to be destroyed and their vineyards to be rooted out.—PACHYMERES,[d] I, 151, 165.

[87] [We may here omit, as more properly belonging to religious history, the procession of patriarchs whom Andronicus raised to power and who fairly cudgelled one another with excommunications. Veccus was deposed for Joseph, who yielded to Gregorius, against whom the Arsenites conspired; he fell, and Athanasius lasted four years, leaving wholesale excommunication in a jar, which was not found for four years, and caused immense confusion and terror until Athanasius said he had revoked it some years before as secretly as he had invoked it. He was then restored for a time, till he was forced out for Nephon, who set a better table than the emperor. Glycys followed, and then Gerasimus, who was chosen because he was old and deaf, but he died in a year. His successor was Isaiah, whose failure to be compliant brought on many of the troubles of the later civil wars.]

[88] [The fate of the empire was sealed when Murad took Hadrianopolis in 1361, following this the next year with the capture of Philippopolis and Serres.]



CHAPTER XI

MANUEL II TO THE FALL OF CONSTANTINOPLE

[1391-1453 A.D.]

MANUEL II (1391-1399 A.D.)

The emperor Manuel was at Brusa[89] when he heard of his father's death. He was generally esteemed, being neither destitute of talent nor personal courage, while his disposition was mild and conciliatory. Before Bajazet was informed of the death of Joannes V the new emperor had made his escape, and reached Constantinople in safety; but the sultan treated him as a rebellious vassal in consequence of his secret departure. Joannes Palæologus, the son of Andronicus, who had succeeded his father in the appanage of Selymbria, was encouraged to claim the empire in virtue of the treaty of 1381, by which the succession had been secured to his father and himself. A body of Turkish troops was instructed to ravage the Greek territory up to the very walls of Constantinople; but other matters calling for Bajazet's care, he accepted the submission of Manuel, and the Greek emperor again appeared as a vassal at the Sublime Porte.

The ambition of Bajazet was unbounded, and his love of war was inflamed by an inordinate confidence in his own military talents, and in the power of the Ottoman army. He despised the Christians, and considered it his first duty to reduce them to the condition of subjects, if not of slaves. The position of Manuel was therefore as dangerous as it was degrading; for although the spectacle of a Roman emperor standing as a suppliant before his throne soothed the pride of Bajazet, it was apparent that his vanity would readily yield to his ambition, if an opportunity presented of gaining Constantinople.

[1395-1399 A.D.]

For several years Bajazet was employed consolidating his dominions both in Europe and Asia, and he was compelled to watch the movements of the western powers, which threatened him with a new crusade. At last, when Sigismund, king of Hungary, was about to invade the Ottoman dominions, the sultan convoked an assembly of the Christian princes who were then his vassals, in order to prevent their combining to assist the invaders. Manuel, the Greek emperor, Joannes, despot of Selymbria, Theodore, despot of the

Peloponnesus, Stephen, king of Servia, Constantine Dragazes, the son of Tzarco, prince of the valley of the Vardar, and several Greek, Servian, Bulgarian, and Albanian chiefs of less importance, who were already independent, appeared in the Ottoman camp at Serres. Circumstances induced the emperor Manuel and the despot Theodore to believe that their correspondence with the pope was known to the sultan, and that their lives were in danger. They both fled, and gained their own states in safety. Joannes of Selymbria remained to profit by the flight of his uncles; but Bajazet could only attend to the Hungarian war. His brilliant victory at Nicopolis in 1396 taught all Europe that the discipline of the janizaries was more than a match for the valour of the chivalry of France, and left him at liberty to punish the Greek princes for their desertion. He immediately turned his arms against the despot Theodore, and marched in person into Thessaly. The bishop of Phocis was the first traitor who joined the Mussulmans, and urged them to conquer Greece. The Wallachians of Thessaly and the widow of the count of Galona submitted to the terms imposed on them; and the sultan, seeing that no resistance would be offered to his troops by the Greeks in the Peloponnesus, turned back to Thrace. His generals, Yakub and Evrenus, took Corinth and Argos; while Theodore shut himself up within the walls of Misithra, and contemplated the ruin of his subjects without making an effort to save them. The Ottoman army, after ravaging great part of the peninsula, retired, carrying away immense booty and thirty thousand prisoners, whom they sold as slaves.

As Bajazet was not master of a sufficient naval force to attempt blockading Constantinople, he resolved to undermine the power of Manuel in such a way as would be least likely to awaken the jealousy of the commercial republics of Italy. He fanned the flames of family discord, which shed their lurid light on the records of the house of Palæologus by acknowledging Joannes, despot of Selymbria, as the lawful emperor of Constantinople and supplying him with a Turkish army to blockade Manuel by land.

The emperor Manuel, as soon as he saw that war with Bajazet was inevitable, had sent an ambassador to solicit assistance from Charles VI king of France. The marshal de Boucicault, who had already served with distinction in the East, and had been taken prisoner by Bajazet at Nicopolis, was appointed to command the forces which Charles VI sent to assist the Greek emperor. Boucicault sailed from Aigues-Mortes, and after some delay effected his junction with a fleet composed of eight Genoese, eight Venetian, two Rhodian galleys, and one of Mytilene, and proceeded to Constantinople, where he arrived in 1398. The arrival of Boucicault and his little army, which consisted of six hundred men-at-arms, without horses, six hundred infantry soldiers, and one thousand archers and cross-bowmen, revived the courage of the Greeks. The Genoese and Venetians were well acquainted with the Ottoman coast, and all under the direction of Constantinople carried on a succession of plundering incursions along the Asiatic coast, from the gulfs of Nicomedia and Mudania to the shores of the Black Sea. It was evident that this system of warfare could not long uphold the empire, and Boucicault, finding the Greeks incapable of making any exertions in their own defence, advised Manuel to seek assistance from the western nations. This advice would have in all probability arrived too late, had not the Ottoman power at this moment been threatened by the great Tatar conqueror, Timur. The sultan was therefore as much inclined to conclude a temporary peace as the emperor. The pretensions of Joannes of Selymbria were the only obstacle, and Manuel overcame this difficulty by a generous resolution. He opened communications with his nephew, whom he easily convinced that, if he entered Constantinople with Turkish troops, his reign would prove of short duration. He then offered to receive Joannes as his colleague, and invest him with the government, while he himself visited western Europe. The marshal Boucicault guaranteed these arrangements, and a French force remained in the capital to protect the interests of Manuel during his absence. On the 4th of December, 1399, Joannes entered Constantinople, and was proclaimed emperor, and on the 10th,

Manuel quitted his capital with Boucicault to present himself as a suppliant at the European courts.

[1399-1410 A.D.]

Manuel II gained very little by his mendicant pilgrimage to Italy, France, and England. Some valuable presents were bestowed upon him by Visconti, the magnificent duke of Milan, and Charles VI of France granted him a pension of thirty thousand crowns; but he was compelled to return to Constantinople at the end of two years, with a little money and a few volunteers collected from people poorer and not more numerous than the Greeks. He learned on his way home that his enemy Bajazet had been defeated by Timur at Angora, and that the Ottoman Empire was utterly ruined. On reaching Constantinople he deprived his nephew Joannes, who had ruled during his absence, of the imperial title, and banished him to Lemnos. Joannes had already placed the Greek Empire in a state of vassalage to the Tatar conqueror; Manuel ratified the treaty, and paid to Timur the tribute which he had formerly paid to Bajazet. Rarely has the world seen a more total defeat than that sustained by the Ottoman army. Bajazet died a captive in the hands of Timur.

Rarely has so great a victory produced so little effect on the fate of the vanquished. For a moment, indeed, the Ottoman power was humbled, and an opening formed for the revival of the Greek Empire; but no energy remained in the political organisation of the Hellenic race beyond the confined sphere of local and individual interests; while the institutions of Orkhan, surviving the defeats and civil wars of the Ottomans, soon restored power to their central government, and rendered the sultan again the arbiter of the fate of Greece.

The civil wars among the sons of Bajazet had no small influence in prolonging the existence of the Greek Empire. The Ottoman historians reckon an interregnum of ten years after the battle of Angora, during which four of the sons of Bajazet contended for the sovereignty. Suleiman, Isa, and Mousa successively perished, and the youngest of the family, Muhammed I, at last reunited all his

father's dominions, and was regarded as his legitimate successor and the fifth sultan of the Ottomans, including Osman, the founder of the dynasty.

After the battle of Angora, Suleiman sought safety in Constantinople, where he concluded a treaty with the emperor Manuel in the year 1403, by which he yielded up Thessalonica, the valley of the Strymon, Thessaly, and the coast of the Black Sea, as far as Varna, to the Greeks. Joannes of Selymbria was recalled from Lemnos, and established at Thessalonica with the title of emperor; but the control of the government was vested by Manuel in the hands of Demetrius Leontaris, a Byzantine noble. In return for the cession of these provinces, the emperor furnished Suleiman with money to collect an army and to establish his authority over the remainder of the Ottoman dominions in Europe.

[1410-1421 A.D.]

But the debauchery of Suleiman at last induced the janizaries to join Mousa, and Suleiman was slain in attempting to escape to Constantinople, 1410 A.D. The close alliance which had existed between Suleiman and Manuel induced Mousa to turn his arms against the Greek Empire. He reconquered all the towns in Macedonia and Thessaly which his brother had ceded to Manuel, with the exception of Thessalonica and Zeitounion. Mousa then laid siege to Constantinople; but his operations were paralysed by the destruction of a naval armament he had fitted out. The emperor had strengthened the imperial fleet, the command of which he had entrusted to his natural brother, named also Manuel, a man of courage and military talents. The admiral gained a complete victory over the Ottoman fleet; but his brilliant success excited the jealousy of his imperial brother. On returning to receive the thanks of his country, he was thrown into prison on an accusation of treason, and remained a prisoner during the life of his brother. The siege of Constantinople was merely a succession of skirmishes under its walls, in which several Greek nobles were slain; and the attention of Mousa was soon exclusively occupied by the attacks of his brother Muhammed.

Mousa rendered his government as unpopular by his severity as Suleiman by his debauchery, and many of the Ottoman officers in Europe invited Muhammed to seize the throne. The emperor Manuel agreed to furnish transports to convey the Asiatic troops over the Bosporus; but he refused to admit them into Constantinople, though he allowed them to form their camp under its walls. The first operations of Muhammed were unsuccessful: but at last he forced Mousa to retire to Hadrianopolis, who, in the end, was deserted by all his followers and slain, 1413 A.D. Little more than ten years had elapsed from the day that Muhammed, then a mere youth, fled from the field of Angora with only one faithful companion, until he reunited under his sway nearly all the extensive dominions which had been ruled by his father. Timur had not perceived the fact that, the tribute of Christian children being the keystone on which the whole fabric of the Ottoman power rested, its resources were really much greater in Europe than in Asia.

The Greek Empire enjoyed an uninterrupted peace during the reign of Muhammed I, which lasted until the year 1421; and Manuel devoted his attention during this period to restoring some order in the public administration, and to re-establishing the sway of the central authority in the distant provinces of the empire. After completing his reforms in the civil, financial, military, and ecclesiastical departments of Constantinople, he found it necessary to visit the provinces in person, in order to reduce the local power of the Greek archons within reasonable bounds. He quitted Constantinople in the month of July, 1413, and commenced his operations by reducing the island of Thasos, the citadel of which resisted his little army for two months. The emperor then visited

Thessalonica, where it appears that he remained more than a year. His nephew Joannes, who was governor of the city, assumed the monastic habit; but whether he was compelled by the emperor to adopt this step, in order to allow the new reforms to be carried into execution, is uncertain. The despot Andronicus, the emperor's second son, was appointed governor of Thessalonica. After his father's death he sold the city to the Venetians for the sum of fifty thousand sequins.

In March, 1415, Manuel visited the Peloponnesus. The Roman Empire of the East had shrunk to such pitiful dimensions that the Byzantine province, which comprised only about three-quarters of that peninsula, was now its most extensive province. The first care of the emperor was to strengthen the means of defending this territory by fortifying the Isthmus of Corinth. He then directed his attention to reforming the abuses which the feudal tyranny of the Franks and the unprincipled fiscal extortions of the Greek archons had introduced into the administration. These abuses were rapidly exterminating the Greek agricultural population, and making way for the immigration of a ruder class of Albanian labourers.

When we compare the reforms of Manuel with the legislation of Orkhan, we are astonished at the great intellectual superiority displayed by the Ottomans at this period. The Greek emperor adopted only a few temporary devices to arrest the progress of social putrefaction in a diseased society. His own talents and the energies of his people were incompetent to make any bold efforts for extirpating the sources of the evil, and for infusing a spirit of honesty and patriotism into Greek society. Yet the fact that Greek society as well as the imperial government was rapidly decaying was generally acknowledged. The despot Theodore, Manuel's brother, who died about the year 1407, had felt the task of undertaking the regeneration of Greece so hopeless, and had found the difficulty of governing the Peloponnesians so great, that he attempted to sell his province to the knights of Rhodes, after he had introduced

numerous colonies of Albanians to fill up the void caused by the decrease of the native population.

From a satirist of the time, we learn that while the emperor Manuel was occupied in diminishing the power and checking the abuses of the archons of the Peloponnesus and of the Constantinopolitan officials, many of the courtiers in his household made a traffic of creating new corruptions in the administration by selling imperial decrees and golden bulls. The character of the native Greeks he declares to be equally bad. He says: "They are formed of three parts: their tongue speaks one thing, their mind meditates another, and their actions accord with neither." There can be no good administration among an utterly demoralised people. When the emperor returned to Constantinople, he carried with him some of the most turbulent and intriguing of the Peloponnesian chiefs, who had, previous to his arrival, contrived to appropriate the greater part of the taxes levied on the people to their own use. Indeed the most important result of Manuel's visit was the introduction of such a degree of order in the provincial administration, that a fixed sum could be regularly remitted to the imperial treasury at Constantinople. His son Theodore remained as his viceroy at Misithra.

[1421-1431 A.D.]

The death of Sultan Muhammed I in 1421 involved the empire in a contest with his son, Murad II. The self-conceit of the Greeks persuaded them that they could guide the progress of the Ottomans by their superiority in diplomacy. No experience could teach them that rhetoric and scholastic learning are feeble arms against military discipline and national courage. A pretender to the Ottoman throne resided at Constantinople, named Mustapha, who asserted that he was a son of Bajazet. He was now acknowledged as lawful sultan, and Manuel concluded with him a treaty, by which Mustapha promised to restore Gallipoli, the Chalcidice of Macedonia, and the maritime cities on the Black Sea, while the emperor engaged to furnish money and military stores. He was abandoned by his

followers, taken prisoner by Murad II, and hanged, in order to convince the world that he was an impostor.

Murad resolved to punish Manuel for his intrigues. The emperor was now weakened by age, and the direction of public affairs was in a great measure entrusted to his son Joannes, who endeavoured to appease the sultan with abject apologies. Murad gave the imperial ambassadors no answer until his preparations were completed. He then marched forward and formed the siege of Constantinople, establishing his own headquarters at the church of the Fountain, and commencing his lines of circumvallation in the month of June, 1422. His lines extended from the Golden Gate to the Wooden Gate; two movable towers were built to assist the storming of the wall, and cannon were employed by the Ottomans for the first time. This early artillery, however, was so ill-constructed and ill-served that it produced little effect. A thousand of the bravest janizaries fell before the walls; while the Greeks, fighting under cover of their battlements, lost only 130 killed and wounded. Murad II did not renew his attack on Constantinople, and the last act of Manuel's reign was to sign a treaty of peace, by which Murad left the empire in possession of a few cities in Thrace, of Thessalonica, and a few forts near the mouths of the Strymon, Mount Athos, Zeitounion, and some places in Thessaly. Manuel also engaged to pay the sultan an annual tribute of three hundred thousand aspers.

Manuel adopted the monastic habit two years before his death, and took the name of Matthew, but he continued to give his advice on public affairs. He died in July, 1425, at the age of seventy-seven, after a reign of thirty-four years.

REIGN OF JOANNES VII (1423-1448 A.D.)

Joannes VII found the Eastern Roman Empire reduced to the city of Constantinople, a few neighbouring towns, Thessalonica, and a part of the Peloponnesus. His reign of twenty-three years passed in almost uninterrupted peace; yet this long period of tranquillity was

productive of no improvement. As far as the revenues both of the government and of the nation were concerned, the emperor and the people alike consumed, before the expiration of each year, all that the year had produced.

The diminution of the Greek population contrasted strangely with the rapid increase of the Ottomans, while their decline in wealth and industry offered a still more unfavourable point of comparison with the Genoese colony of Galata. The trade of the Greeks had passed into the hands of the Italians; the power of the Byzantine emperors was transferred to the Ottoman sultans. The loss of personal dignity and courage followed the loss of national honour and power. Plague and pestilence, as often happens, came as attendants on neglected police, bad government, and social disorder. In the year 1431 a contagious disease of fearful mortality decimated the population of Constantinople; and it was the ninth return of pestilence since the great plague of 1347. Nations, however, are rarely sensible of their own degradation, and at this time the Greeks looked on the Latins with contempt as well as hatred; they despised the western Europeans as heretics, and the Turks as barbarians. Court processions, religious ceremonies, and national vanity amused and consoled them as they hastened along the path of degradation and ruin.

All the fortified posts had been destroyed by Murad II when he besieged Constantinople, and the country, as far as Selymbria, was inhabited only by a few Greeks engaged in agriculture, who dwelt in open villages. The Greek empire ended at Selymbria. The frontier territory of the Ottomans was a similar scene of devastation, the land being tilled by a few Christian peasants for their Turkish masters.

BRIEF UNION OF THE GREEK AND ROMAN CHURCHES

[1430-1440 A.D.]

The conquest of Thessalonica by Sultan Murad in 1430, the quarrels of the despots

Theodore, Constantine, and Thomas in the Peloponnesus, and the insolence of the Genoese of Galata, who attacked Constantinople on account of some disputes relating to the Black Sea trade, warned the emperor Joannes VII that, unless he could secure some efficient military aid from strangers, the Ottoman power would soon overwhelm the Greek Empire. The pope was the only sovereign who possessed sufficient power and influence to obtain effectual aid for the Eastern Empire: but there was no probability that he would exert that influence, unless the emperor Joannes consented to the union of the Greek and Latin churches, and recognised the papal supremacy. In this critical conjuncture the statesmen and ecclesiastics of rank at Constantinople decided that the political exigencies of their situation authorised their truckling even with the doctrines of their church.

In the year 1438 the emperor Joannes and the Greek patriarch made their appearance at the council of Ferrara. In the following year the council was transferred to Florence, where, after long discussions, the Greek emperor and all the members of the clergy who had attended the council, with the exception of the bishop of Ephesus, adopted the doctrines of the Roman church concerning the procession of the Holy Ghost, the addition to the Nicene Creed, the nature of purgatory, the condition of the soul after its separation from the body until the day of judgment, the use of unleavened bread in the sacrament of the Lord's Supper, and the papal supremacy. The union of the two churches was solemnly ratified in the magnificent cathedral of Florence on the 6th of July, 1439, when the Greeks abjured their ancient faith in a vaster edifice and under a loftier dome than that of their own much-vaunted temple of St. Sophia.

The emperor Joannes derived none of the advantages he had expected from the simulated union of the churches. Pope Eugenius, it is true, supplied him liberally with money, but his holiness forgot his promise to send a fleet to defend Constantinople.

On his return Joannes found his subjects indignant at the manner in which the honour and doctrines of the Greek church had been sacrificed in an unsuccessful diplomatic speculation. The bishops who had obsequiously signed the articles of union at Florence, now sought popularity by deserting the emperor, and making a parade of their repentance, lamenting their wickedness in falling off for a time from the pure doctrine of the orthodox church. The only permanent result of this abortive attempt at Christian union was to increase the bigotry of the orthodox, and to furnish the Latins with just grounds for condemning the perfidious dealings and bad faith of the Greeks. In both ways it assisted the progress of the Ottoman power.

[1440-1448 A.D.]

The emperor Joannes, seeing public affairs in this hopeless state, thought only of keeping on good terms with the sultan. His brother Demetrius, however, who had accompanied him to Florence, shared his apostasy, and partaken of the papal bounty, now basely attempted to take advantage of the popular dissatisfaction with the union. He claimed the throne as being the first child of Manuel who was a Porphyrogenitus, but he trusted to gain his ends by the aid of Turkish troops rather than by the merits of his title or the preference of the Greeks. Collecting a large force composed of the Turkish nomads, who were ready to join any standard that offered them an opportunity of plundering and enslaving the Christians, Demetrius marched to besiege his brother in Constantinople. Sultan Murad took no direct part in the contest, but he allowed Demetrius to enrol Turkish troops without opposition, and viewed with satisfaction a rebellion which tended to weaken the empire. When called upon to choose between the two brothers, the Greek people acknowledged the superiority of the reigning emperor. Demetrius, after plundering the suburbs of Constantinople, saw his army melt away, and was happy to find that his brother's moderation and love of peace was so great that he was allowed to retain his principality at Mesembria with the title of despot.

The deeds of Joannes (Janos) Hunyady might have awakened the Greeks from their lethargy, had any warlike spirit survived in the

nation. The victory of the Hungarian army at the pass of Isladi, and a war with the sultan of Karamania, threatened the Ottoman Empire with serious danger; but the victory of Varna re-established the glory of the sultan's arms. Neither the successes of the Hungarians nor the presence of a papal force in the Hellespont, which at last made its appearance under the command of Cardinal Gondolmieri, could induce Emperor Joannes to unite his cause with that of the western powers. He had obtained too many proofs of the instability and imprudence of their counsels. The moment he heard of the great victory of Sultan Murad at Varna, he sent an embassy to congratulate his suzerain, and solicit a renewal of their alliance, which the sultan immediately granted. Joannes even contrived to avoid taking part in the war carried on against the sultan by his brother Constantine in Greece, and succeeded in preserving uninterrupted peace until his death in 1448. During his inglorious reign of twenty-three years he never forgot that he was a vassal of the Ottoman Empire. He proved precisely the temporising manager of the state that circumstances required; and his pliancy averted, during his lifetime, the calamities which were ready to overwhelm the Greek Empire.

REIGN OF CONSTANTINE XIII (1448-1453 A.D.)

Constantine XIII, the last of the Greek emperors, was residing in his despotat at Sparta when his brother Joannes VII died. As he had been recently engaged in hostilities with the sultan, it was doubtful whether Murad would acknowledge him as emperor, and Demetrius availed himself of these doubts to make another attempt to occupy the throne. The deficiency of truth, honour, and patriotism among the Greek aristocracy during the last century of the Eastern Empire is almost without a parallel in history; but Demetrius was too well known and too generally despised to find a large party even in that worthless aristocracy disposed to espouse his cause, while Constantine, on the other hand, was known to possess both candour

and energy, and was respected by all except the most bigoted among the orthodox Greeks.

[1451 A.D.]

Sultan Murad II died in February, 1451, after a prosperous reign of thirty years, and was succeeded by his son Muhammed II, who was only twenty-one years old. Muhammed II was a man of great ambition and great talents; he united with extraordinary activity and courage a degree of judgment rare in his high station, and still rarer at his early age.

The conquest of Constantinople was the first object of his ambition. It was by nature the capital of his dominions, and as long as it remained in the hands of the Greeks the Ottoman Empire lay open to the invasions of the western Christians. Having concluded a truce for three years with John Hunyady, the young sultan crossed over into Asia to suppress the hostile proceedings of Ibrahim, the sultan of Karamania.

Constantine, who appears to have formed a very erroneous idea of the talents and character of Muhammed, took this opportunity of insulting him in the most sensitive manner by sending an embassy to demand an augmentation of the pension of three hundred thousand aspers, which the Ottoman court had accorded to the Greek for the maintenance of Orkhan, the grandson of Suleiman. The ambassadors were instructed to insinuate that, if the demand were not granted, Orkhan might be allowed to lay claim to the Ottoman throne.

Such an insult was not likely to be ever forgotten by a haughty and ambitious prince. The wary young sultan, however, dismissed the ambassadors with courtesy. But as soon as his Asiatic campaign was finished, he ordered the imperial agents to be expelled from the territory in the valley of the Strymon which had been assigned for the maintenance of Orkhan, and stopped all further payments. Shortly after, without informing Constantine of his intention, he constructed a fortress on the Greek territory at the narrowest part of the Bosporus, opposite a fort which had been constructed by Bajazet

MOHAMMED II

(From a medallion in the Royal Muenz Cabinet, Berlin)

I on the Asiatic shore. The distance between the two forts is about three-quarters of a mile, and a rapid current flows between. The sultan had made every preparation for completing the work with extraordinary celerity. An ample supply of materials had been collected before his object was known, and as soon as the plan of the fortress was marked out, a thousand masons and two thousand labourers worked incessantly to complete the walls.

Constantine had good reason to consider the construction of this fortress on his territory, within five miles of his capital, and commanding its approach from the Black Sea, as an infraction of the treaty between the two empires, but he was too weak to resent this signal revenge for his own recent threats. He complained of the hostile invasion of the Greek territory, but Muhammed treated his reclamations with contempt, observing that the ground on which the fortress was built, having been purchased and paid for, was Turkish property, and the emperor of Constantinople, being a vassal of the Porte, had no right to dispute the will of the sultan.

The first open resistance was offered by some Greeks, who endeavoured to prevent Muhammed's engineers from carrying off the marble columns from a church. These pious Christians were cut to pieces by the Ottoman troops. As the work advanced the sultan's aggressions increased. His soldiers were allowed to plunder; quarrels ensued in which blood was shed, and then the Turks attacked the Greeks who were getting in the harvest, and slew the reapers. Constantine in alarm closed the gates of Constantinople, cut off all

communications between the Greeks and the Ottomans, and sent another embassy to the sultan to ask redress. Muhammed replied by a formal declaration of war.

WAR WITH MUHAMMED

[1451-1452 A.D.]

Both parties now began to prepare for the mortal contest. The siege of Constantinople was to be the great event of the coming year. The sultan, in order to prevent the emperor's brothers in the Peloponnesus from sending any succours to the capital, ordered Tourakhan, the pasha of Thessaly, to invade the peninsula. He himself took up his residence at Hadrianopolis, to collect warlike stores and siege artillery. Constantine, on his part, made every preparation in his power for vigorous defence. He formed large magazines of provisions, collected military stores, and enrolled all the soldiers he could muster among the Greek population of Constantinople. But the inhabitants of that city were either unable or unwilling to furnish recruits in proportion to their numbers. Bred up in peaceful occupation, they probably possessed neither the activity nor the habitual exercise which was required to move with ease under the weighty armour then in use.

So few were found disposed to fight for their country, that not more than six thousand Greek troops appeared under arms during the whole siege. The numerical weakness of the Greek army rendered it incapable of defending so large a city as Constantinople, even with all the advantage to be derived from strong fortifications. The emperor was, therefore, anxious to obtain the assistance of the warlike citizens of the Italian republics, where good officers and experienced troops were then numerous. As he had no money to engage mercenaries, he could only hope to succeed by papal influence. An embassy was sent to Pope Nicholas V, begging immediate aid, and declaring the emperor's readiness to complete the union of the churches in any way the pope should direct. Nicholas despatched Cardinal Isidore, the metropolitan of Kieff, who

had joined the Latin church, as his legate. Isidore had represented the Russian church at the council of Florence; but on his return to Russia he was imprisoned as an apostate, and with difficulty escaped to Italy. He was by birth a Greek; and being a man of learning and conciliatory manners, it was expected that he would be favourably received at Constantinople.

The cardinal arrived at Constantinople in November, 1452. He was accompanied by a small body of chosen troops, and brought some pecuniary aid, which he employed in repairing the most dilapidated part of the fortifications. Both the emperor and the cardinal deceived themselves in supposing that the dangers to which the Greek nation and the Christian church were exposed would induce the orthodox to yield something of their ecclesiastical forms and phrases. It was evident that foreign aid could alone save Constantinople, and it was absurd to imagine that the Latins would fight for those that treated them as heretics, and who would not fight for themselves. The crisis, therefore, compelled the Greeks to choose between union with the church of Rome or submission to the Ottoman power. They had to decide whether the preservation of the Greek Empire was worth the ecclesiastical sacrifices they were called upon to make in order to preserve their national independence.

CHURCH DISSENSIONS

[1452-1453 A.D.]

In the meantime, the emperor Constantine celebrated his union with the papal church, in the cathedral of St. Sophia, on the 12th of December, 1452. The court and the great body of the dignified clergy ratified the act by their presence; but the monks and the people repudiated the connection. In their opinion, the church of St. Sophia was polluted by the ceremony, and from that day it was deserted by the orthodox. The historian Ducas declares that they looked upon it as a haunt of demons, and no better than a pagan shrine. The monks, the nuns, and the populace publicly proclaimed their detestation of the union; and their opposition was inflamed by

Welcome to our website – the perfect destination for book lovers and knowledge seekers. We believe that every book holds a new world, offering opportunities for learning, discovery, and personal growth. That’s why we are dedicated to bringing you a diverse collection of books, ranging from classic literature and specialized publications to self-development guides and children's books.

More than just a book-buying platform, we strive to be a bridge connecting you with timeless cultural and intellectual values. With an elegant, user-friendly interface and a smart search system, you can quickly find the books that best suit your interests. Additionally, our special promotions and home delivery services help you save time and fully enjoy the joy of reading.

Join us on a journey of knowledge exploration, passion nurturing, and personal growth every day!

ebookmasss.com